

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Modernizing the FCC Form 477 Data Program)	WC Docket No. 11-10
)	
Development of Nationwide Broadband Data to)	
Evaluate Reasonable and Timely Deployment of)	WC. Docket No. 07-38
Advanced Services to All Americans, Improvement)	
of Wireless Broadband Subscribership Data, and)	
Development of Data on Interconnected Voice)	
over Internet Protocol (VoIP) Subscribership)	
)	
Service Quality, Customer Satisfaction,)	
Infrastructure and Operating Data Gathering)	WC Docket No. 08-190
)	
Review of Wireline Competition Bureau Data)	
Practices)	WC Docket No. 10-132
)	

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
I. INTRODUCTION.	2
II. CONGRESS ONLY RECENTLY CONSIDERED THE SCOPE OF THE FORM 477 AND DECIDED AGAINST MANDATING AN EXPANSIVE APPROACH LIKE THAT PROPOSED IN THE NPRM.	3
A. The Scope and Granularity of the Form 477 Data Collection Proposed in the NPRM Far Exceed What Congress Intended in the BDIA.	3
B. The Scope of the Form 477 is Further Constrained by the Paperwork Reduction Act.	4
III. IN KEEPING WITH THE PRESIDENTIAL EXECUTIVE ORDER ON REGULATION, THE FCC MUST ENSURE THAT THE COSTS AND BURDEN OF THE PROPOSED COLLECTIONS DO NOT OUTWEIGH THE BENEFITS.	5
IV. THE PROPOSALS TO IMPOSE EXPANDED DATA COLLECTIONS ON THE DEPLOYMENT OF MOBILE SERVICES ARE UNNECESSARY, IMPRACTICAL, AND OVERLY BURDENSOME.	6
A. Additional Data in the Form 477 Regarding Mobile Voice or Broadband Broadband Coverage Area is Unnecessary and Would Be Overly Burdensome For Providers to Report.	6
B. Mobile Service Providers Should Not be Required to Submit Signal Strength Data on Form 477.	10
C. Reporting “Actual” Broadband Speeds is Difficult, If Not Impossible, For Wireless Providers.	12
D. The FCC Should Not Require Mobile Service Providers to Report on the Spectrum Bands That Are Used in Specific Locations.	15
V. COLLECTING PRICING DATA IS UNNECESSARY AND BURDENSOME.	16
VI. EXPANDING THE FORM 477 SUBSCRIPTION DATA COLLECTION REQUIREMENTS WOULD BE OVERLY BURDENSOME AND UNNECESSARY.	19
VII. IT IS UNNECESSARY, IMPRACTICAL, AND BURDENSOME TO COLLECT WIRELESS SERVICE QUALITY AND CUSTOMER SATISFACTION DATA IN THE FORM 477.	21
A. Wireless Service Quality and Customer Satisfaction Information Is Available from Other Sources.	21
B. The Form 477 Should Not Collect Network Performance Metrics of Wireless Service Providers.	22
VIII. THE COMMISSION SHOULD ENSURE THAT ANY OTHER MODIFICATIONS TO THE FORM 477 ARE NECESSARY, PRACTICAL, AND NOT UNDULY BURDENSOME.	23

IX. THE FCC SHOULD ENSURE THAT COMPETITIVELY SENSITIVE AND CONFIDENTIAL DATA ARE PROTECTED.....	25
X. CONCLUSION.....	27

EXECUTIVE SUMMARY

The NPRM proposes broad and sweeping expansions of the data that telecommunications carriers and broadband providers, including wireless carriers, would be required to collect and provide on FCC Form 477. While some of this information may be of nominal interest, the Commission's authority to collect data is circumscribed by certain well-founded legal strictures. When Congress debated the Broadband Data Improvement Act ("BDIA") in 2008, it considered mandating many of the data collections that the Commission proposes in the NPRM, but either declined to do so or directed the Commission to obtain the information through consumer surveys instead. The Paperwork Reduction Act ("PRA") also constrains the Commission's data collection authority, requiring *inter alia* that any data be "necessary" for the proper performance of the agency's duties and that it have "practical utility." Finally, the Commission has committed to complying with President Obama's January 18, 2011 Executive Order which requires agencies to "propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs" and "tailor regulations to impose the least burden on society," taking into account "the costs of cumulative regulation." Against this backdrop, it is clear that several of the proposed new collections cannot be supported.

First, coverage information for mobile voice and data networks is already available from American Roamer, and this data is the best available. It is a compilation of the information that carriers provide to their customers, and they are under considerable pressure to ensure it is accurate. Signal strength information is no more than a derivative of coverage information and, reported by itself, is so variable and difficult to measure that the data would have no practical utility.

Similarly, any effort to require wireless broadband providers to report on "actual" broadband speeds would be a difficult, if not impossible, exercise in light of the myriad of factors that affect consumer download and upload experiences in a given location on a given device at a given moment. The information already collected on broadband speeds is more than adequate for the Commission's purposes. Similarly, the spectrum bands used to provide mobile broadband are dynamic given loading and other factors, and the Commission's existing wireless rules already allow it to achieve its spectrum management obligations.

CTIA can foresee no way the Commission could collect information about wireless voice or broadband pricing through carrier reporting that would be superior in both timeliness and accuracy to simply visiting each carrier's website. In addition to changing frequently, these services are sold to consumers in a myriad of different packages, either separately or bundled with each other and/or equipment, depending on the consumer's needs. Wireless service quality and consumer satisfaction information is widely available from third-party sources such as J.D. Power & Associates and others – consistent with the BDIA's conclusion that such information should be collected directly from consumers.

Recently, members of the Administration and the FCC have inquired about how to reduce regulatory burdens. CTIA argues in this filing that first the Commission should work to ensure that it does not increase regulatory burdens. It can then work to reduce existing burdens. Removing or reducing existing regulatory burdens, but then adding new burdens, will do little to spur investment and drive new jobs. Further, wherever possible, the Commission should reduce the burden of the Form 477. Multi-state filings should be permitted. No additional ownership

information should be reported, as this is available from other Commission data collections. Wireless providers do not generally collect social metric data such as race or gender from their customers, and the Commission should not require them to do so. The frequency of the Form 477 should not be increased. In any event, the Commission must ensure that the confidentiality of the competitively sensitive information in the Form 477 is protected.

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COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

CTIA – The Wireless Association® (“CTIA”)¹ submits the following comments in response to the Federal Communications Commission’s (“Commission” or “FCC”) above-captioned Notice of Proposed Rulemaking (“NPRM”).² Throughout this filing, CTIA argues that the NPRM’s proposed additions to Form 477 not only are unnecessary, but also are counter to the goals of both the Chairman and the Obama Administration to reduce regulatory

¹ CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers Commercial Mobile Radio Service (“CMRS”) providers and manufacturers, including cellular, Advanced Wireless Service, 700 MHz, broadband PCS, and ESMR, as well as providers and manufacturers of wireless data services and products.

² *Modernizing the FCC Form 477 Data Program*, Notice of Proposed Rulemaking, WC Docket Nos. 11-10, 07-38, 08-190, 10-132, FCC 11-14 (rel. Feb. 8, 2011) (“NPRM”).

burdens, also reflected in the statements of several Commissioners. CTIA urges the Commission to streamline the Form 477 reporting process wherever possible, and to refrain from expanding the data collection to include additional unnecessary and burdensome obligations.

I. INTRODUCTION

CTIA supports the Commission's Data Innovation Initiative to modernize and streamline the agency's collection, use, and dissemination of data. As the NPRM acknowledges, an important part of the initiative is ensuring that the data collected by the Commission is within the scope of the Commission's statutory mandate to gather data, as expressed in the Broadband Data Improvement Act of 2008 ("BDIA")³ and other statutes, and "is useful for supporting informed policymaking, promoting competition, and protecting consumers" as shaped by the benefits and burdens of the reporting obligations.⁴ In light of the Paperwork Reduction Act ("PRA") and President Obama's recent Executive Order on improving regulation and the regulatory review process,⁵ the Commission bears the responsibility of demonstrating that the benefits of its Form 477 data collection proposals outweigh the costs and burdens. Specifically, for each proposed data collection, the Commission must undertake a three-step inquiry: (1) Is the reporting requirement tailored to gather information that is "least burdensome" in light of the direction provided in the BDIA? (2) Has the Commission reasonably determined that the benefits of each new requirement justify its costs? (3) Does the Commission take into account the cost of

³ Broadband Data Improvement Act of 2008, Pub. L. No. 110-385, 122 Stat. 4097 (codified at 47 U.S.C. §§ 1301-04) ("BDIA").

⁴ NPRM at ¶ 1.

⁵ Executive Order, *Improving Regulation and Regulatory Review* (Jan. 18, 2011), available at <http://www.whitehouse.gov/the-press-office/2011/01/18/improving-regulation-and-regulatory-review-executive-order>.

cumulative data collection regulations? As discussed in more detail below, these standards cannot be met for many of the new data collections proposed in the NPRM.

II. CONGRESS ONLY RECENTLY CONSIDERED THE SCOPE OF THE FORM 477 AND DECIDED AGAINST MANDATING AN EXPANSIVE APPROACH LIKE THAT PROPOSED IN THE NPRM.

A. The Scope and Granularity of the Form 477 Data Collection Proposed in the NPRM Far Exceed What Congress Intended in the BDIA.

In 2008, Congress enacted the BDIA, finding that “[i]mproving Federal data on the deployment and adoption of broadband service will assist in the development of broadband technology across all regions of the nation.”⁶ As the NPRM observes, the BDIA mandated that the Commission undertake an annual inquiry into broadband deployment.⁷ This Congressional mandate, however, did not include collecting several of the types of detailed data included in the NPRM, such as signal strength, spectrum bands, and highly granular data. Further, the statute calls for other data that the NPRM proposes to include in Form 477 to be collected through consumer surveys.⁸

When debating the BDIA, Congress declined to adopt extensive data collection requirements such as those in the NPRM.⁹ The Commission should not attempt to reconsider, and certainly not go beyond, areas that Congress already considered and rejected. The House-passed bill (H.R. 3919) – which did not become law – would have expressly required the

⁶ BDIA at § 102(3); 47 U.S.C. § 1301(3).

⁷ See NPRM at ¶ 12. See also 47 U.S.C. §§ 1302-1303.

⁸ BDIA at § 4(c)(1); 47 U.S.C. § 1303(c)(1).

⁹ In the House of Representatives’ consideration of the Senate version ultimately enacted into law, Representative Markey (then Chairman of the Energy and Commerce Subcommittee on Energy and the Environment) expressly stated that “I wish the Senate bill [passed into law] contained the more rigorous data collection and disclosure that was contained in the House-passed bill.” H.R. 3919, Cong. Reg. H10620 (Sept. 29, 2008).

collection of information at the ZIP code level relating to the “type of technology used,” and the number of residential and business subscribers both at the ZIP code level and statewide within various tiers of service. Even the House-passed version, however, did not go so far as to mandate the broad collection of pricing and quality of service and the degree of subscription-related data proposed in the NPRM.¹⁰ Thus, Congress already has determined that much of the information that the NPRM proposes to collect from service providers is unnecessary or should be collected from other sources; the Commission should not now second-guess Congress’s decision.

B. The Scope of the Form 477 is Further Constrained by the Paperwork Reduction Act.

Pursuant to the PRA, the Commission must find that its information collection “is necessary for the proper performance of the functions of the agency, including that the information has practical utility.”¹¹ The NPRM fails to demonstrate that the additional data collection requirements are necessary for the agency’s proper performance of its duties, or that the additional data will have practical utility (*i.e.*, the agency’s ability “to use the information” and “process such information in a timely and useful fashion”) under the PRA. In addition, the PRA requires that any new rule “be implemented in ways consistent and compatible, to the maximum extent practicable, with the existing reporting and recordkeeping practices of” Form 477 filers. As discussed below, wireless carriers do not readily have the capability to perform many of the proposed new collections with their current billing and reporting systems. Accordingly, the Commission’s authority to impose the information collection burdens set forth in the NPRM is far more restricted than the NPRM would indicate.

¹⁰ H. Rep. 110-443, at 2, 14 (2007).

¹¹ 44 U.S.C. § 3506(c)(2).

III. IN KEEPING WITH THE PRESIDENTIAL EXECUTIVE ORDER ON REGULATION, THE FCC MUST ENSURE THAT THE COSTS AND BURDEN OF THE PROPOSED COLLECTIONS DO NOT OUTWEIGH THE BENEFITS.

On January 18, 2011, President Obama issued an Executive Order entitled “Improving Regulation and the Regulatory Review Process” directing federal agencies to review existing rules or consider whether new proposals create barriers that may unnecessarily burden businesses and the economy.¹² Specifically, the Executive Order, in relevant part, requires each agency to:

- “propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify);” and
- “tailor its regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations.”¹³

Chairman Genachowski subsequently directed the Commission to “perform its responsibilities consistent with the principles in the executive order.”¹⁴ In those same remarks, Chairman Genachowski stressed that:

One thing government at all levels can do is ensuring [sic] efficient, effective regulation. We need rules that serve legitimate public needs without erecting costly or unnecessary barriers. The National Broadband Plan identified red tape as a significant obstacle to broadband deployment. Overly burdensome rules and regulations can slow down deployment and raise costs. It also can limit businesses ability to invest in new technologies and hire new workers.

¹² Executive Order, *Improving Regulation and Regulatory Review* (Jan. 18, 2011), available at <http://www.whitehouse.gov/the-press-office/2011/01/18/improving-regulation-and-regulatory-review-executive-order>.

¹³ *Id.*

¹⁴ Prepared Remarks of Chairman Julius Genachowski, Federal Communications Commission, Broadband Acceleration Conference, Washington, D.C. (Feb. 9, 2011) at 4, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-304571A1.pdf.

The Commission must therefore demonstrate that the proposed Form 477 data collection requirements are consistent with the principles of the Executive Order, including the principle that the benefits of its proposals outweigh the costs and burdens.

The Commission also must bear in mind that data collection requirements impose burdens on carriers that extend beyond the mere collection of the data, and that resources spent on these activities must be diverted from other, more productive endeavors. Moreover, in addition to internal resources needed to compile and file data, many providers retain independent third parties such as accounting firms to comprehensively review regulatory compliance filings such as those made in Form 477 submissions. These firms verify the accuracy of the filings on which corporate certifications are based. With increased regulatory filing obligations, the resources dedicated to ensuring that even more voluminous data is reported accurately are thus diverted from other activities, such as broadband deployment and innovation.

As discussed in more detail in the remainder of these comments, the Commission has not appropriately justified – and cannot appropriately justify – the substantial burdens that would be imposed by many of the proposals set forth in the NPRM.

IV. THE PROPOSALS TO IMPOSE EXPANDED DATA COLLECTIONS ON THE DEPLOYMENT OF MOBILE SERVICES ARE UNNECESSARY, IMPRACTICAL, AND OVERLY BURDENSOME.

A. Additional Data in the Form 477 Regarding Mobile Voice or Broadband Broadband Coverage Area is Unnecessary and Would Be Overly Burdensome For Providers to Report.

Mobile service providers should not be required to collect and submit additional mobile voice or broadband coverage data in the Form 477 because several reliable and independent sources of information already are available to consumers that show in detail where mobile voice

and broadband networks have been deployed.¹⁵ The proposed collection thus is not the “least burdensome” to society, and the burdens of producing the proposed information far exceed the benefits of the new requirement.

Mobile service providers routinely provide the most current coverage information on their websites and in other customer-facing materials that are available in stores and retail outlets. For example, mobile service providers offer maps on their websites that allow consumers to check coverage in locations where they live, work and travel.¹⁶ Service providers are under significant competitive pressure to provide up-to-date and accurate coverage information to existing and prospective customers. Failure to provide consumers with the information they need to make informed decisions about their wireless products and services can result in loss of business and added operating expense.¹⁷ Thus, the coverage data that wireless carriers already provide likely is the most accurate information available at any given time.

¹⁵ See NPRM at ¶¶ 56-58. See also www.AmericanRoamer.com. A wide variety of other organizations and websites also analyze coverage of wireless service providers. See, e.g., http://www.empower.com/pages/telecom_marketright.htm; www.CellReception.com; www.deadcellzones.com; www.CellCoverage.com.

¹⁶ See, e.g., AT&T Coverage Viewer, available at <http://www.wireless.att.com/coverageviewer/?wtSlotClick=1-0054Y2-0-1&WT.svl=calltoaction#?type=voice>; Sprint Coverage Check, available at <http://coverage.sprint.com/IMPACT.jsp?INTNAV=ATG:FT:Cov>; T-Mobile Personal Coverage Check, available at <http://www.t-mobile.com/coverage/pcc.aspx>; Verizon Wireless Coverage Locator, available at <http://vzwmap.verizonwireless.com/dotcom/coveragelocator/Default.aspx?requesttype=NEWREQUEST?requesttype=newsearch&zip=11217&coveragetype=voiceandmessaging>.

¹⁷ For example, carriers that follow the CTIA Consumer Code for Wireless Service provide consumers with a trial period of at least 14 days within which the consumer may cancel service if they are dissatisfied. If a consumer purchases service based on carrier assertions that coverage exists in the consumer’s community of interest, but then finds it does not, the consumer will return the phone, which can no longer be sold as new. High churn figures also negatively affect a carrier’s financial position.

Burdensome reporting requirements for wireless coverage also cannot be justified because accurate coverage information is available through third party sources such as American Roamer.¹⁸ Moreover, the most current information is directly available to the FCC with no need to obtain it through formal data reports with inherent compliance burdens and reporting delays. The NPRM notes the Commission’s prior criticisms of American Roamer’s data, but these criticisms are unfounded. Discounting the data because it originates from mobile wireless service providers is irrational because providers are unlikely to misreport data. If they were to misreport data, for example by over-reporting coverage, unhappy customers would likely complain, return products, cancel service, and tarnish the provider’s reputation.¹⁹ This criticism of carrier-provided data stands in contrast with other proceedings—for example, the FCC permits carriers to specify contours for build-out showings.²⁰ Criticizing the data source based on different definitions of “coverage” also is unreasonable. Different air interfaces and technologies have different signal strength or carrier-to-interferer requirements for services. Even different devices using the same technologies have different requirements. The simple fact that differences exist does not mean that coverage is “overstated.”

The Commission also unfairly criticizes the American Roamer data because “[t]he data do not expressly account for factors such as signal strength, bit rate, or in-building coverage, and

¹⁸ See www.AmericanRoamer.com. A wide variety of other organizations and websites also analyze coverage of wireless service providers. See, e.g., http://www.empower.com/pages/telecom_marketright.htm; www.CellReception.com; www.deadcellzones.com; www.CellCoverage.com.

¹⁹ Indeed, FCC Quarterly Complaints do not identify “Carrier Marketing and Advertising” as a large source of significant customer complaints. See News Release, Quarterly Report on Informal Consumer Complaints Released, April 2, 2010, *available at* http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db0402/DOC-297289A1.pdf.

²⁰ One exception to this is for cellular, where all parties concede that the 32 dBu is irrelevant for actual service.

they may convey a false sense of consistency across geographic areas and service providers.”²¹ The implication that carriers submit coverage data without regard to signal strength is irrational, and CTIA knows of no evidence suggesting that the American Roamer contours are not based on signal strength. The statement also suggests that “bit rate” or “in-building coverage” are factors that should be accounted for, but does not even suggest that there may be practical problems associated with attempting to perform such types of adjustments and that any metrics judging the extent of that coverage would be arbitrary and highly dependent on the type of building construction, the user’s location within the building, and the capabilities of each wireless device. Accordingly, the Commission should continue to rely on the coverage and deployment data that is available through American Roamer.

In any event, the data already collected in the current Form 477, in conjunction with data readily available from American Roamer and other sources, is sufficient to inform the Commission about the expansion of broadband networks for universal service purposes, to identify areas that may lack access to broadband services and where such services should be better promoted, and to monitor broadband competition. Mobile broadband providers already are required to report on the Form 477 the census tracts that best represent their broadband service footprint and the speed tier(s) in which they offer service. There is no need for additional data.

It is also unclear whether more granular data would have any “practical utility.”²² At some level of granularity, wireless coverage data becomes variable at any given moment based upon a wide variety of factors such as atmospheric conditions, foliage, terrain, network

²¹ NPRM at ¶ 51 (quoting *14th Report* at 7 n.5).

²² 44 U.S.C. § 3506(c)(2). *See also* Executive Order (benefits of regulation must justify costs; regulations must be tailored to impose the least burden on society).

congestion, and end user equipment, rendering illusory attempts to collect more meaningful granular data.

B. Mobile Service Providers Should Not be Required to Submit Signal Strength Data on Form 477.

The Commission should not adopt the NPRM’s proposal to require mobile service providers to report signal strength data in the Form.²³ Providers currently offer a description of basic signal strength on their websites and at retail locations in order to distinguish themselves in the competitive marketplace. This data also is already collected and compiled by American Roamer, which, as noted above, the Commission should continue to utilize. As with coverage data, the robustly competitive marketplace incents carriers to provide reliable signal strength information to consumers. With such sources of information, the proposed collection is not the “least burdensome,” and the burdens of producing the proposed information far exceed the benefits of the new requirement.

As with additional coverage data, it also is unclear whether signal strength data would have any “practical utility.”²⁴ Wireless signal strength is influenced by a wide variety of environmental, technical and other factors. For example, among other things, wireless signals are affected by the propagation characteristics of the spectrum being utilized,²⁵ network capacity, weather, topography, foliage, the end user’s device, the end user’s proximity to a cell site, and the end user’s location (*e.g.*, in a car, in a building, or outside). These factors can change by the season, day, hour and minute. Moreover, the consumer’s experience of “signal strength” at any

²³ See NPRM at ¶ 61.

²⁴ 44 U.S.C. § 3506(c)(2). See also Executive Order (benefits of regulation must justify costs; regulations must be tailored to impose the least burden on society).

²⁵ It is also worth noting that carriers may utilize multiple different spectrum bands in a single market.

given location depends heavily on the handset or other device that the consumer has selected. As a result, a meaningful measure of “signal strength” would vary depending on the device chosen by the consumer.

Requiring wireless carriers to report signal strength information on Form 477 also would be impractical because currently there is no single, universally reliable measure of signal strength, which depends on multiple technical factors. Meaningful data first would necessitate standardizing the industry’s measurement of these factors, which in and of itself would be a significant challenge requiring substantial technical input. Service providers, in turn, would be required to adopt new, or modify existing, internal processes for measuring and collecting this data, which would be a costly and time consuming exercise. Thus, the benefits of the exercise would never be sufficient to justify its considerable costs.²⁶

Indications of signal strength are not needed for the Commission to fulfill its statutory obligations or otherwise inform itself as to whether advanced telecommunications services are being deployed and available to all Americans in a reasonable and timely fashion. In actively competing for customers, wireless providers have every incentive to provide the signal strength needed to both attract new customers and keep existing ones. As noted above, ample information regarding wireless coverage – including estimates regarding signal strength – already is available to the Commission. Accordingly, the incremental benefit of standardizing and collecting additional signal strength data through the Form 477 is unproven, especially in light of the heavy burden of implementing the requirement.

²⁶ See Executive Order.

C. Reporting “Actual” Broadband Speeds is Difficult, If Not Impossible, For Wireless Providers.

CTIA supports the proposal in the NPRM to consider standardizing across the FCC and NTIA the broadband speed data collected separately by the agencies.²⁷ It is entirely consistent with the PRA and the Executive Order to reduce reporting burdens by facilitating providers’ ability to compile data once for both purposes. Otherwise, the current collection of “advertised” broadband speed data in the Form 477 provides the most reasonable available information about broadband speeds and should not be expanded.

The mobile nature of wireless broadband services provides remarkable utility to consumers, but, as the Commission has acknowledged, mobile wireless broadband is particularly susceptible to factors that may affect speed, and that are not present in wireline networks.²⁸ These factors can include, for example, air interface, distance from a base station, distance from a network hub, network congestion, cell congestion, weather conditions, foliage, topography, and geography.²⁹ Moreover, unlike wireline networks where speeds can be measured independently of end user equipment, wireless devices cannot be uncoupled from the network.³⁰ In the mobile wireless context, attempting to separate the network speed component from the processing

²⁷ NPRM at ¶ 60.

²⁸ “The Broadband Availability Gap,” Omnibus Broadband Initiative Technical Paper 1, FCC, at 66, *available at* Appendix to *Connect America Fund, A National Broadband Plan for Our Future, High-Cost Universal Service Support*, WC Docket Nos. 10-90, 09-51, 05-337, Notice of Inquiry and Notice of Proposed Rulemaking, FCC 10-58 (rel. Apr. 21, 2010) (“[A] wireless network has several layers of complexity that are not found in wireline networks, each of which affect the user experience.”).

²⁹ *See id.*

³⁰ *See* Comments of CTIA – The Wireless Association®, CG Docket No. 09-158, CC Docket No. 98-170, WC Docket No. 04-36, at 16-17 (July 8, 2010).

component of the end user device (if even possible) would generate confusing and inaccurate data.

Consequently, the actual speed of a mobile broadband service that a customer uses can vary from location to location, from minute to minute, and from customer to customer in the same location. CTIA conducted its own speed test across multiple wireless devices and carriers in 2010, which demonstrated that, in a single three minute period, there can be as much as a 97 percent drop in speed followed by a 1200 percent increase in speed, even without movement by the consumer.³¹ Such drastic variability in mobile broadband speed cannot realistically be captured in data submitted as part of the Form 477 program.

Because of these operating variations, there is no meaningful measurement of “actual” mobile broadband speed that should be part of the Form 477 process. However, service providers already have voluntarily developed a variety of methodologies for providing consumers with meaningful information about data speeds. Many service providers supply consumers with information about peak and/or average upload and download data rates, as well as coverage maps that provide information on likely availability and, in some cases, likely speeds.³² These measurement methodologies are based on engineering models that take into

³¹ *See id.* at 2.

³² *See, e.g., Wireless Connections and Coverage*, AT&T available at <http://www.wireless.att.com/businesscenter/plans/network-coverage/wireless-connections-coverage.jsp?wtLinkName=Learnmoreaboutwirelessaccess&wtLinkLoc=BDY> (“BroadbandConnect provides average download throughput of 400-700 kbps on compatible devices”) (last accessed Mar. 29, 2011); *Compare Data Speeds*, Sprint, available at http://shop2.sprint.com/en/stores/popups/compare_data_speeds_popup.shtml (showing that customers can expect average download speeds of 600 kbps to 1.4 Mbps and average upload speeds of 350 kbps to 500 kbps in the Sprint 3G Network) (last accessed Mar. 29, 2011); *Network Speed*, T-Mobile, available at <http://t-mobile-coverage.t-mobile.com/hspa-mobile-broadband> (4G “delivers theoretical peak download speeds of up to 21Mbps and peak upload speeds of up to 5.7Mbps”) and <http://support.t->

account statistically significant numbers of data points and operating environments. While the methodologies are useful to consumers, it would be both difficult and unnecessary to translate them for reporting purposes to the Commission.

The Commission already has access to substantial information about wireless broadband speeds, making further data collection unnecessary. With such sources of information, the proposed collection is not the “least burdensome” to society, and the burdens of producing the proposed information far exceed the benefits of the new requirement. Service providers include census tract data regarding advertised speed tiers in their current Form 477 filings. In addition, third parties conduct their own unbiased studies and provide applications that provide additional information to consumers on broadband performance. For example, PC World conducts extensive and unbiased testing of wireless broadband services and publishes charts and articles summarizing mobile broadband data rates, network performance tests, average upload and download speeds, and reliability.³³

mobile.com/doc/tm23715.xml?related=y&Referring%20Related%20DocID%20List%20Index=1&docid=4949&navtypeid=6&pagetypeid=7&prevPageIndex=4

(“The service will initially boost wireless Web speeds to a range of 200 to 300 kbps. On HSDPA devices, we will see an average data rate of 600 kbps with a peak of 1 mbps.”) (last accessed Mar. 29, 2011); *Network Facts*, Verizon Wireless, available at http://aboutus.vzw.com/bestnetwork/network_facts.html (“Mobile Broadband customers in enhanced broadband wireless coverage areas can expect average download speeds of 600 kilobits per second (kbps) to 1.4 megabits and average upload speeds of 500-800 kbps.”) (last accessed Mar. 29, 2011).

³³ See, e.g., Mark Sullivan, *4G Wireless Speed Tests: Which Is Really the Fastest?* (Mar. 13, 2011), available at http://www.pcworld.com/article/221931/4g_wireless_speed_tests_which_is_really_the_fastest.html. In January and February 2011, PCWorld tested wireless speeds of the four major national carriers in 260 locations spread among 13 U.S. cities using the same locations, methodology, and personnel that it used to test speeds in the same cities in January 2010, allowing it to compare network performance over time.

The advertised speed information already provided in the Form 477, combined with other publicly available information from the industry and third parties, more than suffice to fulfill the Commission's statutory responsibilities.

D. The FCC Should Not Require Mobile Service Providers to Report on the Spectrum Bands That Are Used in Specific Locations.

The Commission should reject the NPRM's proposal that mobile service providers report spectrum usage by band, radio service code, or call sign in the Form 477.³⁴ Neither the Commission's obligations under the BDIA nor the Act mandate the collection of this data. Such information is not necessary to "determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion"³⁵ or to present a meaningful "international comparison" of broadband capability.³⁶ Furthermore, such information is unnecessary to fulfill the Commission's obligations under Section 254 and 706 of the Act to inquire into and ensure the availability of advanced telecommunications services. These statutory obligations do not concern the usage of a particular license or spectrum band, but rather whether broadband networks reach all Americans.

Further, with respect to the Commission's "spectrum management responsibilities under Title III of the [Act],"³⁷ the agency already has adopted mechanisms to monitor spectrum management through its general licensing requirements by mandating build-out requirements and

³⁴ See *id.* at ¶ 63.

³⁵ 47 U.S.C. § 1302(b)

³⁶ 47 U.S.C. § 1303(b).

³⁷ NPRM at ¶ 63.

discontinuance notifications.³⁸ Accordingly, the proposal cannot be viewed as tailored to be the “least burdensome” option that justifies the cost of the reporting requirement.

The Form 477, and the underlying purposes that shape the Commission’s Form 477 data collection efforts, concern the broadband services provided over the network as a whole, not usage of an individual license or spectrum band. Indeed, a mobile network is comprised of many interlocking elements, which can include a variety of spectrum blocks, cell sites, backhaul facilities, and back office support equipment, as well as customer handsets. The spectrum band, type of license, or the exact license that may be used to provide mobile broadband service to a customer at any point in time in a particular geographic area can change depending on, among other things, the amount of network traffic, network maintenance, and configuration of the consumer’s device.³⁹ For example, during “peak” hours, service providers may utilize several different spectrum bands and licenses to meet demand, but use a fraction of their spectrum during periods in which there is less demand for capacity. A data collection requirement on spectrum in use at specific locations represents costly administrative burden on service providers. It would serve no apparent purpose, and should be rejected.

V. COLLECTING PRICING DATA IS UNNECESSARY AND BURDENSOME.

The proposal to include pricing data in the Form 477 data collection would provide little, if any, useful information and impose considerable burdens on providers.⁴⁰ As an initial matter, the BDIA instructed the FCC to collect this data through consumer surveys, not from carriers.

³⁸ See 47 C.F.R. §§ 1.946, 1.955.

³⁹ NPRM at ¶ 63.

⁴⁰ See NPRM at ¶¶ 66-76.

Moreover, there is no indication that the Commission could collect this data in a way that would have “practical utility” or such that the benefits would outweigh the costs. Wireless service plans vary widely and are not readily susceptible to comparison based solely on price. Wireless service providers compete vigorously through pricing and bundling of services, as well as on a number of other service characteristics (*e.g.*, coverage, service quality, and available equipment). In particular, the marketplace has evolved to provide an extensive array of pricing options designed to be attractive to different types of consumers with widely varying needs. For example, service options and their prices differ based upon, among other things: the length of the contract, if any; the monthly allowances for minutes, messaging, and data usage; the availability of discounts or “rollover” usage; whether the service is prepaid or post-paid; whether the service is bundled with subsidized equipment or other types of services; whether the service is for an individual account or a group/family plan; and the service’s contract terms and conditions. Wireless providers are constantly innovating, including in their pricing, and new plans and discounts are announced frequently.

This variety is extremely valuable to consumers because it allows them to find services and plans that best meet their needs. The tremendous diversity in products and pricing, however, also means that plans are not readily comparable to one another based solely on price. The best plan for any given consumer will depend on that consumer’s particular needs.

Consequently, none of the Commission’s proposals for analyzing pricing data would be likely to produce useful information. For example, the Commission’s proposal to collect and compare retail prices for “basic” voice and broadband offerings fails to take into account the wide variety and complexity of service packages available to consumers.⁴¹ Even prices for

⁴¹ See *id.* at ¶ 71.

“basic” plans can vary greatly depending upon the factors discussed above. Similarly, the Commission suggests that it could define a basket of services and collect, or require service providers to publicly disclose, the price of the basket.⁴² Such an effort would be needlessly duplicative of the objective market-based data collection already conducted by the U.S. Department of Labor for its Consumer Price survey.⁴³ Moreover, any FCC-defined plan designated by the Commission for purposes of the Form 477 data collection would have only the most tenuous connection to the realities of what is offered in the marketplace – and would likely have no connection to the needs of any particular consumer. Further, the provider with the cheapest “basic” plan as reported on the Form 477 may not offer the best price for the bundle of services that any given consumer actually needs.

The Commission similarly suggests that service providers report the total revenue associated with all offerings, identify the service attributes associated with that revenue (*e.g.*, voice, video, broadband), and key descriptors of those services (*e.g.*, basic, high speed, very high speed), which the Commission would use to perform statistical analyses to determine the average effective price for each attribute.⁴⁴ This approach, however, would not yield meaningful results given the apparently subjective classification of service attributes and descriptors. The NPRM fails to explain what benefits actually would be derived from this type of averaged data, other than acknowledging that the analysis could “generate a significant number of measurements.”⁴⁵

⁴² *See id.*

⁴³ *Consumer Price Index*, Bureau of Labor Statistics, U.S. Department of Labor, available at <http://www.bls.gov/cpi/data.htm> (last accessed Mar. 30, 2011).

⁴⁴ *See* NPRM at ¶ 72.

⁴⁵ *Id.*

Such a complex data collection cannot be considered the “least burdensome option” given the vast amount of pricing information and analysis already available to the Commission. Service providers make detailed pricing information available on their websites and in retail outlets. There is a wide array of consumer-oriented websites that analyze and compare service packages and rates among wireless service providers.⁴⁶ Multiple third parties offer independent surveys and analyses of pricing data, such as J.D. Power and Associates and other market analysts.⁴⁷ The NPRM offers no justification why an additional, expansive data collection is necessary in light of the pricing information that is already available. Expanding the Form 477 to include pricing data would be duplicative and unnecessarily burdensome.

VI. EXPANDING THE FORM 477 SUBSCRIPTION DATA COLLECTION REQUIREMENTS WOULD BE OVERLY BURDENSOME AND UNNECESSARY.

The current Form 477 and other sources provide the Commission with ample data about wireless voice and data connections. Thus, there is no reason to impose the additional burden of requiring providers to subdivide subscriber data into categories such as spectrum band, customer class (residential/business), or air interface technology that have little relevance to the Commission’s statutory duties and policy goals.⁴⁸ The NPRM offers no explanation for why this additional effort would be warranted, how it would be tailored to be least burdensome, or how the benefits outweigh the costs of the new collection requirements.

⁴⁶ See, e.g., www.myrateplan.com; www.wirefly.com; www.bills shrink.com.
<http://cnet.phonedog.com/cell-phone-research/compare-plans.aspx>.

⁴⁷ See J.D. Power and Associates, Telecom Ratings, *available at* <http://www.jdpower.com/telecom>.

⁴⁸ See NPRM at ¶ 79.

As explained in Section IV.D. above, Form 477 data collection is appropriately focused on service providers' networks and services as a whole, not individual spectrum bands or technologies that may be in use at any point in time in a particular geographic area. Identifying the number of mobile voice and/or broadband subscribers associated with a particular spectrum band or technologies, at best, generates meaningless data that is unnecessary to meet the Commission's statutory mandates and, at worst, produces misleading information.

The NPRM acknowledges that collecting detailed mobile subscription data can be difficult.⁴⁹ For example, over-counting of subscribers could occur if customers use more than one wireless device, while under-counting is possible depending on how family plans are recorded. These challenges are arguably greatest with respect to prepaid subscribers because no billing address is associated with the subscriber. It also is unclear how best to account for less traditional mobile devices, such as e-readers, telemetry systems, and machine-to-machine systems. The difficulty of the task should not be compounded when no policy purpose will be served.

Distinguishing between residential and business accounts, which is currently required in the Form 477, should be eliminated for mobile services. It is common for consumers to use their mobile devices for both personal and work purposes, rendering the distinction between business and residential subscribers meaningless. Even if it could be shown to be meaningful to distinguish between residential and business accounts for mobile service, accurate data are not readily available to providers because subscriptions used primarily for business purposes may be paid for by an individual (and reimbursed), or vice-versa. Polling each and every subscriber would be extremely costly and time consuming for service providers and would unnecessarily

⁴⁹ *Id.*

aggravate consumers. Accordingly, the Commission should eliminate from the Form 477 the requirement that mobile wireless providers separately report business and residential subscriber data.

VII. IT IS UNNECESSARY, IMPRACTICAL, AND BURDENSOME TO COLLECT WIRELESS SERVICE QUALITY AND CUSTOMER SATISFACTION DATA IN THE FORM 477.

CTIA opposes the Commission's proposal to expand the Form 477 to include service quality and customer satisfaction data for wireless services.⁵⁰ Service quality and customer satisfaction data is readily available from commercial sources, and there would be no benefit to collecting data on more granular metrics like packet loss, latency, or jitter.

A. Wireless Service Quality and Customer Satisfaction Information Is Available from Other Sources.

The BDIA contemplates that the Commission would obtain consumer satisfaction and service quality information from consumer surveys, not from a carrier data collection.⁵¹ The Commission should not expand its data collections efforts in the face of such guidance from Congress. Moreover, expanding the Form 477 to include data regarding service quality and customer satisfaction is unnecessarily duplicative given that such information already is available from other sources. For example, numerous third party consumer groups closely monitor the wireless industry, and they survey and analyze service quality and customer satisfaction information. J.D. Power and Associates and other independent parties conduct a variety of unbiased surveys each year to measure customer experience.⁵² In addition, the

⁵⁰ NPRM at ¶¶ 89-99.

⁵¹ Compare 47 U.S.C. §§ 1303(c)(1), 1302(b).

⁵² For example, J.D. Power and Associates surveys and analyzes mobile phones, smart phones, call quality, customer care, and retail sales satisfaction. See J.D. Power and Associates, Telecom Ratings, available at <http://www.jdpower.com/telecom>.

Commission gathers such information through its informal complaint process as well as by conducting its own surveys. These and other sources – including the customer surveys mandated in the statute – are more than sufficient for the Commission to fulfill its statutory responsibilities. Duplicative data collection in the Form 477 is unnecessary and thus contrary to the PRA and the Executive Order.

B. The Form 477 Should Not Collect Network Performance Metrics of Wireless Service Providers.

No reason exists for the Form 477 to collect information regarding specific network metrics such as packet loss, latency, jitter, or network outages.⁵³ The Commission's own outage reporting system provides detailed and up-to-date information about significant network outages and disruptions for voice services, including those that affect enhanced 911 facilities and airports.⁵⁴ When adopting its outage reporting requirements, the Commission took into consideration the appropriate thresholds that would trigger the obligation to file a report but not unduly burden service providers.⁵⁵ For broadband providers, the question of outage reporting is already before the FCC in another proceeding.⁵⁶ Thus, to the extent network outage or disruption data is relevant to the Commission's goals, the agency currently has ready access to such information.

⁵³ See NPRM at ¶ 98.

⁵⁴ See 47 C.F.R. § 4.9(e).

⁵⁵ See generally *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 16830 (2004).

⁵⁶ *Public Safety and Homeland Security Bureau Seeks Comment on Whether the Commission's Rules Concerning Disruptions to Communications Should Apply to Broadband*, Public Notice, 25 FCC Rcd 8490 (2010).

For consumers, of course, the competitive marketplace provides the best assurance of network performance. If one provider's performance is lacking compared to its competitors', it will suffer in the marketplace. The competitive imperative to obtain and retain customers helps assure solid network performance.

Moreover, information about specific outages or performance issues within a network may not have any impact on the service provided to consumers. Many wireless carriers use packet-switched networks, which allow packets to be transmitted using multiple pathways. As a result, providers routinely route traffic around network elements that are experiencing problems, making information on specific network outages or performance issues irrelevant to the real issues of importance to the Commission.

Other network disclosures, such as those regarding traffic volume and network congestion, are unnecessary to fulfill the Commission's statutory mandates. The proposed collections are not the "least burdensome," and the burdens of producing the proposed information far exceed the benefits of the new requirement.

VIII. THE COMMISSION SHOULD ENSURE THAT ANY OTHER MODIFICATIONS TO THE FORM 477 ARE NECESSARY, PRACTICAL, AND NOT UNDULY BURDENSOME.

The NPRM seeks comment on several other proposals to revise the Form 477 data collection. The Commission should ensure that any such revisions are necessary, practical and not overly burdensome to service providers.

Multi-State Filings. CTIA supports the proposal to redesign the electronic interface for the Form 477 to allow parties to submit data for multiple states as a single file.⁵⁷ The current process requires parties to file separate reports for each state in which they provide service,

⁵⁷ See NPRM at ¶ 38.

which can be very time consuming, particularly for those parties operating in a large number of states. Allowing parties to file one report for all states would reduce the time necessary to complete the filing process.

Ownership Information. All carriers report ownership information on Form 499-A, and parties that hold commercial wireless licenses already submit detailed ownership information on the Form 602. To the extent the Form 477 is expanded to include ownership information, it should not collect information beyond what wireless licensees already disclose in their Form 602 filings.⁵⁸ In fact, wireless service providers should have the option of simply cross-referencing their current Form 602 filings in their Form 477s. Such an approach would save service providers from re-entering data that already is available in the Commission’s databases, which would be unnecessarily time consuming for parties with complex ownership structures.

Social Metrics and Other Data. The Commission should reject proposals to collect in the Form 477 “socioeconomic” and “social metrics” data such as the ethnicity and gender of filers, and data on the availability of “hardware and software” in underserved areas.⁵⁹ Most providers of capital-intensive communications and broadband services are owned by corporations and partnerships, which do not have gender or ethnicity. Although corporations may have shareholders, it is highly unlikely that they collect such information. To do so would be extremely difficult, not only because some shareholders may object to providing such personal information, but also because some companies have hundreds, thousands or even millions of shareholders. Similarly, collecting data on hardware and software would be an overwhelming task, particularly given the constant influx of new technologies and services. As such, this

⁵⁸ See *id.* at ¶¶ 102-03.

⁵⁹ NPRM at ¶ 105.

information is outside the scope of the Commission’s data collection mandates, and is clearly impractical and overly burdensome.

Frequency of Reporting. The Commission should reject proposals to increase the frequency of filing the Form 477, which currently is a semi-annual obligation. The BDIA itself calls for an “annual” inquiry.⁶⁰ Moreover, each semi-annual report takes significant resources and time to prepare, particularly for those companies with operations in multiple states. The Commission’s own estimate is that completing the current Form 477 takes approximately 289 hours (*i.e.*, at eight hours a day, it would take more than 36 days to complete the report).⁶¹ CTIA’s members have indicated that the actual time to complete the current report is significantly greater, particularly for larger carriers. If carriers were required to file quarterly, they would likely have to begin preparing the next report immediately upon completion of the prior period’s form. There is little, if any, public benefit to increasing reporting frequency. For example, there are few significant advantages to receiving broadband deployment information over a three-month versus a six-month window. Increasing the frequency of reporting would be far too burdensome on service providers and should be rejected.

IX. THE FCC SHOULD ENSURE THAT COMPETITIVELY SENSITIVE AND CONFIDENTIAL DATA ARE PROTECTED.

The communications marketplace, and the wireless marketplace in particular, is marked by intense competition. Service providers compete in many ways, among them price of service bundles, speed and reliability of service, and consumer satisfaction. The Form 477 currently contains (and, by all indications, after this rulemaking will continue to contain) highly

⁶⁰ 47 U.S.C. § 1302(b).

⁶¹ See Instructions for Local Telephone Competition and Broadband Reporting (FCC Form 477) at 22.

proprietary and competitively sensitive data concerning networks, services, and subscribers. Disclosure of this competitive data would negatively impact wireless carriers by disclosing to competitors sensitive information about how a particular carrier may engineer and optimize its network to maximize service quality and speed, as well as carrier marketing efforts to win customers through aggressive pricing and service bundles.

Accordingly, it is essential that the Commission continue to afford carrier-specific information disclosed in the Form 477 the highest level of protection possible. The most efficient and effective way of doing so is to continue to allow service providers to request confidential treatment by checking a box on the Form 477.⁶² This approach ensures that no confidential data is inadvertently made public. Moreover, the Commission should refrain from making the confidential information publicly available at any point.⁶³ To this end, the Commission should not allow access to company-specific data by researchers, which would only increase the risk of disclosure of highly sensitive information to competitors.

Moreover, Form 477 data should only be released in an aggregated form, such that no individual provider's data is identifiable (unless the provider affirmatively agrees to the disclosure). This approach is consistent with prior Commission practice as well as Department of Justice guidelines.⁶⁴

⁶² See NPRM at ¶ 109.

⁶³ See *id.*

⁶⁴ See, e.g., *Numbering Resource Optimization*, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574, 7604 (“[D]isaggregated, carrier-specific [numbering] forecast and utilization data should be treated as confidential.”); Statements of Antitrust Enforcement Policy in Health Care (August 1996), *available at* <http://www.usdoj.gov/atr/public/guidelines/0000.htm>. It would be strange, to say the least, for the Commission to require carriers to share competitively significant data through the collection and release of Form 477 Data that the antitrust laws otherwise restrict.

X. CONCLUSION

Accordingly, the Commission should reform the Form 477 data collection consistent with these comments.

Respectfully submitted,

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